June 28, 1826

Mr. Connell:

This for your files.

We will send a simplified form for general reference shortly.

J. C. B.

3191
3989
3899

10079 Tons Jarrett mill

2149
1000
802

3951 Isherwood

8097 Robinson

~~60000~~
~~400,000~~ 22 22
$250000.

11000) 250,000

in Dreadno

KANSAS EXPLORATIONS INCORPORATED

REPORT - FOR YEAR OF 1 9 2 5

ORE RESERVES

Method Of Calculation

An ore hole, in the practice of this Company, has been any hole containing at least seven feet of three percent zinc or its equivalent. Thus a hole containing only five feet of 5% Zn or even one with three feet of 7% Zn would still be an ore hole. Since lead concentrates are worth, roughly, twice as much as zinc, lead is given a value of twice as great as zinc where necessary. Thus seven feet of 1½ % lead, as a minimum, would supposedly constitute an ore hole, although in general, lead is present in smaller amounts than zinc and merely adds in a valuable way to the tonnage of zinc.

Percentages used in assays are entirely in terms of metallic zinc or lead. This means, strictly speaking, that the figures presented should represent tons of metal developed. However, no allowance has been made either for waste in pillars or for loss in milling. It is believed that these losses are approximately compensated by the fact that the estimates are based on metallic content, and it is assumed that the tons figured (metal) will equal approximately the

J.C.B.

recovery in sulphide.

The aim has been to adopt a uniform method which would give some idea of the quantity of ore developed, and which, with more experience, would lend itself to the use of a constant in different areas which would give a more accurate estimate.

It is assumed from general experience in the district that the average ore body is about thirty-three feet in width. In ore bearing ground holes are usually spaced either 33, 67 or 100 feet apart. In figuring ore developed, a single hole in ore is assumed to prove a circular area 33 feet in diameter or 855 square feet. With two adjacent ore holes 33 feet apart it is assumed that the circles may be connected by tangents giving an area of 1944 square feet.

Groups of holes often become rather irregularly spaced and judgment must be used in estimating how far to connect by tangents. Several factors are important in determining the question. Among them, the general characteristics of the locality, the strength of mineralization, character of formation, horizon of the ore, and the thoroughness with which the area has been drilled are all important. Where runs are fairly persistent and have been proved by cross section drilling connections may sometimes be made between holes a few hundred feet apart.

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A number of details concerning local areas should be explained. In the Smithfield (Isherwood) area ore occurs ordinarily in open flint ground immediately above the rather dense and well defined Grand Falls Chert. Drill holes often show some ore in the Grand Falls, especially if they have not been carefully cased and ore has had a chance to sift down from above. The practice in estimating in this area has been to study the records and cuttings from the holes to determine approximately the upper level of the Grand Falls and, having adopted this as a probable mine level, to ignore all ore, even good assays, below this depth.

In the Wase Camp (Hurlbut lease, etc.) the best assays are from a fractured, dolomitized flint and limestone beneath the Grand Falls Chert. The limestone and dolomite are soft and pulverize so thoroughly that they yield relatively little cuttings, probably enriched in zinc. For this reason the area credited to the deepest ore is restricted more narrowly than would be necessary elsewhere, and even then it is probable that the estimates should be regarded with some doubt.

On the Robinson lease where the ore has proved to lie rather more regularly than elsewhere and where drill holes per unit area are relatively fewer, it has been considered justifiable to use a 80 foot circle rather than 53 feet. It is thought possible that this could be used also in some other cases, possibly for the deep ore on the Yaryan lease, for

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instance, but this has not been done.

Some question may be raised as to the number of cubic feet of rock assumed to equal a ton, since the figure used varies from 12.5 to 15. This distinction has been based on the experience of some other companies in figuring reserves in this district and the figure adopted has been chosen with reference to the relative amount of openings and pore space in different areas.

How near the estimates come to working out in practice may be tested partially in the case of the Isherwood mine for which figures are presented herewith. This estimate represents the application of the above method to an ore body that was fairly completely drilled, after the method had been applied to several others. In this case it appears now that the estimate probably was about ten percent too high.

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ORE RESERVES

According to estimates which are believed to be conservative, yet fairly in accord with practical expectations, the Company had developed on January 1st, 1926 very nearly 30,000 tons of concentrates, distributed among sixteen leases as shown in detail on the accompanying table. Of this amount approximately 1,500 tons on four leases (#562 - 735 - 743 and 766) is to be regarded as unmineable because occurring in small deposits not conveniently situated for operation.

These leases probably will have to be disposed of during the coming year. Because of similar difficulties it has been necessary during the past year to abandon small tonnages of ore which had been developed on three other leases (#623, Danglade; #682, Lyerla; #808, Abrams).

The figures given are to be regarded as estimates of ore fairly proved and by no means measure the limits of possible or even probable ore on many of the leases. Complete prospecting and actual mining will very likely yield from two to three times as much ore as is given in these estimates.

J.C.B.

ORE RESERVES SUMMARY - 1924 - 1925

TOBS CONCENTRATES

Lease	Developed Jan.1st. 1925	Developed Jan.1st. 1926 Area X	Area Y
383 - Foley	2028	5191	
396 - Jarrett	5125	3989	
417 - Yaryan	80	710	
494 - Ellis	639	2149	
495 - Hurlbut	1049	2245	
562 - Chanute	439	876	
592 - Carter	75	75	
594 - Martin	1190 (sublease)	802 (a)	
603 - Isherwood	3017	1000	
605-646-Orstott & Hunt-Thomas	-		1085
724 - Robinson	1000	8097	
735 - Roth	-	111	
742 - McCoy	-	430	
743 - Mullen	-	2895	
766 - Knight	-	195	
836 - Sullivan	-		1595
Total	17692	25767	2780
Grand Totals	17692	29,547	

REGIONAL SUMMARY

	January 1st,1925	January 1st,1926.
Northern Fields,Joplin to Waco	11,539	9,676
Southern Field, Fisher Area	6,153	19,871

SUMMARY BY OPERATIONS

	January 1st,1925	January 1st,1926.
Operating Properties	5,153	19,176
Non-operating properties	12,539	10,371

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